MARKED-UP VERSION OF THE AMENDED AND NEW CLAIM(S)

1. (Twice Amended) A speech encoding system for encoding a speech data signal including a plurality of frames, said speech encoding system comprising:

a speech data rate determinator; and

a plurality of speech data signal encoders, including at least a first encoder using a first speech encoding scheme and a second encoder using a second speech encoding scheme different from said first speech encoding scheme, wherein said first encoder is a fixed bit-rate encoder;

wherein said speech data rate determinator determines a data rate for encoding each of said frames and selects one of plurality of said speech data signal encoders according to said data rate.

10. (Thrice amended) A speech encoding system for encoding a speech data signal including a plurality of frames, said speech encoding system comprising:

a speech data rate determinator;

a plurality of speech data signal encoders, including at least a first encoder using a first speech encoding scheme, a second encoder using a second speech encoding scheme different from said first speech encoding scheme, and a third encoder, wherein said first encoder is a fixed bit-rate encoder; and

a network controller capable of selecting at least two of said plurality of speech data signal encoders, including said first encoder and said second encoder;

wherein said speech data rate determinator determines a data rate for encoding each of said frames and selects, according to each said data rate, one of said speech data signal encoders selected by said network controller.

16. (Twice Amended) A method of encoding a speech signal including a plurality of speech signal frames, said encoding method comprising the steps of:

determining a data rate of one of said speech signal frames;

selecting one of a plurality of speech encoders according to said data rate, said plurality of speech encoders including at least a first encoder using a first speech encoding scheme and a second encoder using a second speech encoding scheme different from said first speech encoding scheme, wherein said first encoder is a fixed bit-rate encoder; and

encoding said one of said speech signal frames using said one of said plurality of speech encoders;

wherein said determining, selecting and encoding steps are repeated so as to encode said speech signal frame-by-frame.

22. (Twice Amended) A method of encoding a speech signal including a plurality of speech signal frames, said encoding method comprising the steps of:

choosing, according to a predetermined factor, one group from a plurality of groups of speech encoders, said chosen group of speech encoders including at least a first encoder using a first speech encoding scheme and a second encoder using a second speech encoding scheme different from said first speech encoding scheme, wherein said first encoder is a fixed bit-rate encoder;

determining a data rate of one of said speech signal frames;

selecting, according to said data rate, one of said plurality of speech encoders in said chosen group; and

encoding said one of said speech signal frames using said selected speech encoder;

wherein said determining, selecting and encoding steps are repeated so as to encode said speech signal frame-by-frame.

50. (New) The system of claim 1, wherein said first encoder is a multi-rate encoder, including a plurality of rates.

51. (New) The system of claim 1, wherein said second encoder is a variable-rate encoder, including a plurality of rates.

52. (New) The system of claim 1, wherein said second encoder is a fixed bit-rate encoder.

53. (New) A speech encoding system for encoding a speech data signal including a plurality of frames, said speech encoding system comprising:

a speech data rate determinator; and

a plurality of speech data signal encoders, including at least a first encoder using a first speech encoding scheme and a second encoder, wherein said first encoder is a fixed bit-rate encoder;

wherein said speech data rate determinator determines a data rate for encoding each of said frames and selects one of plurality of said speech data signal encoders according to said data rate.

54. (New) The system of claim 53, wherein said second encoder is a variable bit-rate encoder, including a plurality of rates.

55. (New) The system of claim 53, wherein said second encoder is a fixed bit-rate encoder.

56. (New) The system of claim 53, wherein said plurality of speech encoders include GSM EFR, IS-641 and GSM AMR compatible encoders.

57. (New)The method of claim 53, wherein said plurality of said speech encoders include G.729 ITU compliant speech encoders of 0, 1.5, 6.4, 8.0 and 11.2 kbps data rates.

58. (New) The method of claim 53, wherein said plurality of said speech encoders include G.729 ITU compliant speech encoders of 0, 8.0 and 11.2 kbps data rates and G.723.1 ITU compliant speech encoders of 5.3 and 6.4 kbps data rates.

59. (New) The method of claim 53, wherein said first speech encoding scheme is based on G.729 and said second speech encoding scheme is based on G.721.

60. (New) The method of claim 53, wherein said first speech encoder is based on G.729 at 8.0 kbps and said second speech encoder is based on G.723.1 at 5.3 kbps.

61. (New) A speech encoding system for encoding a speech data signal including a plurality of frames, said speech encoding system comprising:

a speech data rate determinator; and

a plurality of speech data signal encoders, including at least a first encoder using a first speech encoding scheme and a second encoder using a second speech encoding scheme different from said first speech encoding scheme;

wherein said speech data rate determinator determines a data rate for encoding each of said frames and selects one of plurality of said speech data signal encoders according to said data rate.

62. (New) The system of claim 61, wherein said second encoder is a variable bit-rate encoder, including a plurality of rates.

63. (New) The system of claim 61, wherein said second encoder is a fixed bit-rate encoder.

64. (New) The system of claim 61, wherein said plurality of speech encoders include GSM EFR, IS-641 and GSM AMR compatible encoders.

65. (New)The method of claim 61, wherein said plurality of said speech encoders include G.729 ITU compliant speech encoders of 0, 1.5, 6.4, 8.0 and 11.2 kbps data rates.

66. (New) The method of claim 61, wherein said plurality of said speech encoders include G.729 ITU compliant speech encoders of 0, 8.0 and 11.2 kbps data rates and G.723.1 ITU compliant speech encoders of 5.3 and 6.4 kbps data rates.

67. (New) The method of claim 61, wherein said first speech encoding scheme is based on G.729 and said second speech encoding scheme is based on G.721.

68. (New) The method of claim 61, wherein said first speech encoder is based on G.729 at 8.0 kbps and said second speech encoder is based on G.723.1 at 5.3 kbps.

CLEAN VERSION OF THE AMENDED CLAIM(S)

1. (Twice Amended) A speech encoding system for encoding a speech data signal including a plurality of frames, said speech encoding system comprising:

a speech data rate determinator; and

a plurality of speech data signal encoders, including at least a first encoder using a first speech encoding scheme and a second encoder using a second speech encoding scheme different from said first speech encoding scheme, wherein said first encoder is a fixed bit-rate encoder;

wherein said speech data rate determinator determines a data rate for encoding each of said frames and selects one of plurality of said speech data signal encoders according to said data rate.

10. (Thrice amended) A speech encoding system for encoding a speech data signal including a plurality of frames, said speech encoding system comprising:

a speech data rate determinator;

a plurality of speech data signal encoders, including at least a first encoder using a first speech encoding scheme, a second encoder using a second speech encoding scheme different from said first speech encoding scheme, and a third encoder, wherein said first encoder is a fixed bit-rate encoder; and

a network controller capable of selecting at least two of said plurality of speech data signal encoders, including said first encoder and said second encoder;

wherein said speech data rate determinator determines a data rate for encoding each of said frames and selects, according to each said data rate, one of said speech data signal encoders selected by said network controller.

16. (Twice Amended) A method of encoding a speech signal including a plurality of speech signal frames, said encoding method comprising the steps of:

determining a data rate of one of said speech signal frames;

selecting one of a plurality of speech encoders according to said data rate, said plurality of speech encoders including at least a first encoder using a first speech encoding scheme and a second encoder using a second speech encoding scheme different from said first speech encoding scheme, wherein said first encoder is a fixed bit-rate encoder; and

encoding said one of said speech signal frames using said one of said plurality of speech encoders;

wherein said determining, selecting and encoding steps are repeated so as to encode said speech signal frame-by-frame.

22. (Twice Amended) A method of encoding a speech signal including a plurality of speech signal frames, said encoding method comprising the steps of:

choosing, according to a predetermined factor, one group from a plurality of groups of speech encoders, said chosen group of speech encoders including at least a first encoder using a first speech encoding scheme and a second encoder using a second speech encoding scheme different from said first speech encoding scheme, wherein said first encoder is a fixed bit-rate encoder;

determining a data rate of one of said speech signal frames;

selecting, according to said data rate, one of said plurality of speech encoders in said chosen group; and

encoding said one of said speech signal frames using said selected speech encoder;

wherein said determining, selecting and encoding steps are repeated so as to encode said speech signal frame-by-frame.

50. (New) The system of claim 1, wherein said first encoder is a multi-rate encoder, including a plurality of rates.

51. (New) The system of claim 1, wherein said second encoder is a variable-rate encoder, including a plurality of rates.

52. (New) The system of claim 1, wherein said second encoder is a fixed bit-rate encoder.

53. (New) A speech encoding system for encoding a speech data signal including a plurality of frames, said speech encoding system comprising:

a speech data rate determinator; and

a plurality of speech data signal encoders, including at least a first encoder using a first speech encoding scheme and a second encoder, wherein said first encoder is a fixed bit-rate encoder;

wherein said speech data rate determinator determines a data rate for encoding each of said frames and selects one of plurality of said speech data signal encoders according to said data rate.

54. (New) The system of claim 53, wherein said second encoder is a variable bit-rate encoder, including a plurality of rates.

55. (New) The system of claim 53, wherein said second encoder is a fixed bit-rate encoder.

56. (New) The system of claim 53, wherein said plurality of speech encoders include GSM EFR, IS-641 and GSM AMR compatible encoders.

57. (New)The method of claim 53, wherein said plurality of said speech encoders include G.729 ITU compliant speech encoders of 0, 1.5, 6.4, 8.0 and 11.2 kbps data rates.

58. (New) The method of claim 53, wherein said plurality of said speech encoders include G.729 ITU compliant speech encoders of 0, 8.0 and 11.2 kbps data rates and G.723.1 ITU compliant speech encoders of 5.3 and 6.4 kbps data rates.

59. (New) The method of claim 53, wherein said first speech encoding scheme is based on G.729 and said second speech encoding scheme is based on G.721.

60. (New) The method of claim 53, wherein said first speech encoder is based on G.729 at 8.0 kbps and said second speech encoder is based on G.723.1 at 5.3 kbps.

61. (New) A speech encoding system for encoding a speech data signal including a plurality of frames, said speech encoding system comprising:

a speech data rate determinator; and

a plurality of speech data signal encoders, including at least a first encoder using a first speech encoding scheme and a second encoder using a second speech encoding scheme different from said first speech encoding scheme;

wherein said speech data rate determinator determines a data rate for encoding each of said frames and selects one of plurality of said speech data signal encoders according to said data rate.

62. (New) The system of claim 61, wherein said second encoder is a variable bit-rate encoder, including a plurality of rates.

63. (New) The system of claim 61, wherein said second encoder is a fixed bit-rate encoder.

64. (New) The system of claim 61, wherein said plurality of speech encoders include GSM EFR, IS-641 and GSM AMR compatible encoders.

65. (New)The method of claim 61, wherein said plurality of said speech encoders include G.729 ITU compliant speech encoders of 0, 1.5, 6.4, 8.0 and 11.2 kbps data rates.

66. (New) The method of claim 61, wherein said plurality of said speech encoders include G.729 ITU compliant speech encoders of 0, 8.0 and 11.2 kbps data rates and G.723.1 ITU compliant speech encoders of 5.3 and 6.4 kbps data rates.

67. (New) The method of claim 61, wherein said first speech encoding scheme is based on G.729 and said second speech encoding scheme is based on G.721.

68. (New) The method of claim 61, wherein said first speech encoder is based on G.729 at 8.0 kbps and said second speech encoder is based on G.723.1 at 5.3 kbps.